

## ABSTRACT OF THE DISCLOSURE

The present invention provides a method of transducing the conformational change undergone by a signaling aptamer upon  
5 binding a ligand to a differential signal generated by a reporter molecule. Also provided is a method of detecting and quantitating a ligand in solution using an aptamer conjugated to a fluorescent dye (signaling aptamer) to bind to the ligand and measuring the resultant optical signal generated.